

ABSTRACT OF THE DISCLOSURE

A silylation treatment unit includes a chamber, a heating mechanism provided in this chamber for heating a substrate, a supplying mechanism for supplying a vapor including a silylation reagent into the chamber. The unit also has a substrate holder for holding the substrate in the chamber, in which an interval between the heating mechanism and the substrate is adjustable to at least three levels or more. The substrate is received such that it is least influenced by a heat in the chamber by maximizing the interval from the heating mechanism. The interval is brought comparatively closer to the heating mechanism to wait until the temperature inside the chamber obtains a high planer uniformity. The interval is brought further closer to the heating mechanism after a high planer uniformity is obtained such that a silylation reaction occurs.